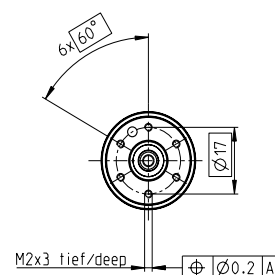
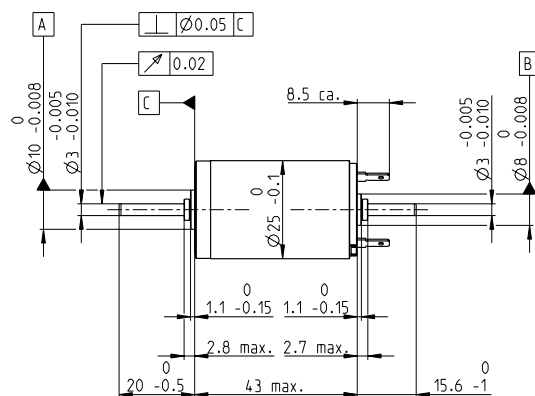
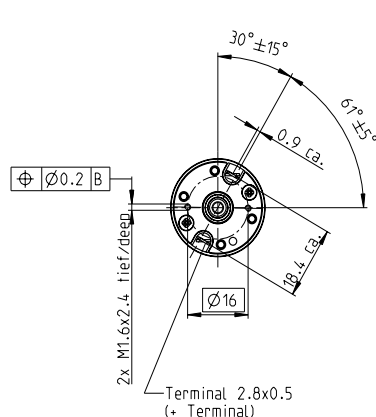


RE 25 Ø25 mm, Graphite Brushes, 20 Watt



M 1:2

- Stock program
- Standard program
- Special program (on request)

Part Numbers

302534	339149	339150	339151	339152	339153	339154	339155	339156	339157	339158
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Motor Data

Values at nominal voltage																			
1	Nominal voltage	V	7.2	9	12	18	24	30	36	48	48	48	48						
2	No load speed	rpm	10500	9710	9620	10400	10900	9210	10100	9540	8450	6720	4650						
3	No load current	mA	133	93.2	68.1	50.6	40.2	25	23.7	16.4	13.7	9.89	6						
4	Nominal speed	rpm	8970	8260	8310	9190	9690	8010	8860	8360	7270	5530	3430						
5	Nominal torque (max. continuous torque)	mNm	21.9	24.4	27.5	29.1	30.4	31.4	30.7	31.7	32.3	32.9	32.8						
6	Nominal current (max. continuous current)	A	3.68	2.97	2.45	1.85	1.5	1.04	0.931	0.68	0.614	0.495	0.341						
7	Stall torque	mNm	259	238	268	297	325	265	279	270	243	192	127						
8	Stall current	A	42.1	28.1	23.2	18.4	15.6	8.61	8.24	5.67	4.51	2.84	1.3						
9	Max. efficiency	%	79	81	84	86	88	88	88	89	88	88	86						
Characteristics																			
10	Terminal resistance	Ω	0.171	0.32	0.517	0.98	1.53	3.49	4.37	8.47	10.6	16.9	36.8						
11	Terminal inductance	mH	0.016	0.031	0.057	0.112	0.186	0.407	0.493	0.979	1.25	1.97	4.11						
12	Torque constant	mNm/A	6.15	8.46	11.5	16.1	20.8	30.8	33.8	47.7	53.8	67.7	97.6						
13	Speed constant	rpm/V	1550	1130	828	591	460	311	282	200	177	141	97.8						
14	Speed / torque gradient	rpm/mNm	43.2	42.8	37.1	35.9	34	35.2	36.5	35.6	35.1	35.2	36.9						
15	Mechanical time constant	ms	6.52	6.06	5.62	5.36	5.24	5.17	5.16	5.13	5.12	5.12	5.14						
16	Rotor inertia	acm ²	14.4	13.5	14.5	14.3	14.7	14	13.5	13.8	13.9	13.9	13.3						

Specifications

Thermal data

17	Thermal resistance housing-ambient	14.4 K/W
18	Thermal resistance winding-housing	5.1 K/W
19	Thermal time constant winding	27.7 s
20	Thermal time constant motor	543 s
21	Ambient temperature	-30...+100°C
22	Max. winding temperature	+155°C

Mechanical data (ball bearings)

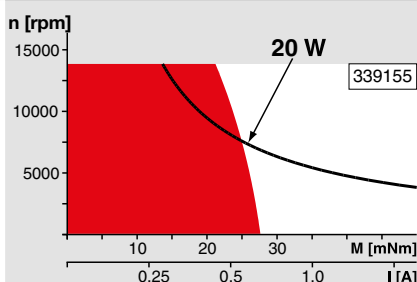
23	Max. speed	14 000 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.025 mm
26	Max. axial load (dynamic)	20 N
27	Max. force for press fits (static) (static, shaft supported)	60 N 1000 N
28	Max. radial load, 5 mm from flange	35 N

Other specifications

29	Number of pole pairs	1
30	Number of commutator segments	11
31	Weight of motor	115 g

Values listed in the table are nominal.
Explanation of the figures on page 68.

Operating Range



Comments

Continuous operation

In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.

Short term operation

The motor may be briefly overloaded (recurring).

Assigned power rating

maxon Modular System

Details on catalog page 32

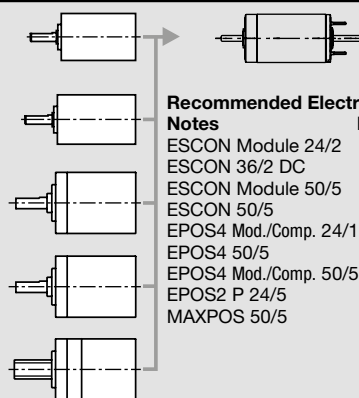
Planetary Gearhead
 Ø22 mm
 0.5 Nm
 Page 340

Planetary Gearhead
 Ø26 mm
 0.75 - 4.5 Nm
 Page 346

Planetary Gearhead
 Ø32 mm
 0.75 - 6.0 Nm
 Page 348/349/352

Koaxdrive
 Ø32 mm
 1.0 - 4.5 Nm
 Page 359

Screw Drive
 Ø32 mm
 Page 382-387



Recommended Electronics:

Notes	Page
ESCON Module 24/2	454
ESCON 36/2 DC	454
ESCON Module 50/5	455
ESCON 50/5	457
EPOS4 Mod./Comp. 24/1.5	462
EPOS4 50/5	463
EPOS4 Mod./Comp. 50/5	463
EPOS2 P 24/5	470
MAXPOS 50/5	473

Encoder MB

Encoder MR
128 - 1000 CPT,
3 channels
Page 432

Encoder HED 5540

500 CPT,
3 channels
Page 441/442

DC-Tacho DCT

Ø22 mm
 0.52 V
 Page 449

Brake AB 28

24 VDC
0.4 Nm
Page 491